

REMARKS

Reconsideration and allowance of this application, as amended, is respectfully requested.

This Amendment is in response to the Office Action dated June 29, 2004. By the present Amendment, independent claim 1 has been amended to clarify the invention. Claim 7, correspondingly, has been canceled as being redundant inasmuch as the subject matter added to claim 1 corresponds to features previously defined in claim 7.

Reconsideration and removal of the 35 U.S.C. § 102(b) rejection of claims 1-20 as being anticipated by U.S. Patent 5,220,530 to Itoh is respectfully requested. By the present Amendment, claim 1 has been amended to incorporate subject matter similar to that previously found in dependent claim 7. More specifically, referring to Fig. 1 (solely for purposes of example), an arrangement is defined in claim 1 in which both the gate of a write transistor (e.g., QW) and a terminal of the capacitor coupled to the storage MOSFET (QR) are both coupled to the same word line WL11. This is discussed, for example, on page 10, lines 1-9 of the present application.

On page 5 of the Office Action, it is stated with regard to claim 7 that:

"Regarding claim 7, Itoh discloses the semiconductor integrated circuit according to claim 1, wherein each of the plurality of word lines is coupled with the gate of the write transistor and the gate of the storage MOSFET (Fig. 2)."

Although the prior art Fig. 2 of Itoh shows a connection of a capacitor toward line 36 and the gate of a write transistor to another word line 39, it is respectfully submitted

that a careful reading of the Itoh reference results in a conclusion that the claimed invention is actually a significantly different structure.

More specifically, as noted above, claim 1 has been amended to define that the capacitor terminal and the gate of the write transistor are commonly connected to the same word line. (Referring to Fig. 1 of the present application, the word line WL11, for example). However, as set forth in column 1, line 35 et seq. of the Itoh reference, on the other hand, the capacitor in Fig. 2 of Itoh is connected to a different word line 36 than the word line 39 to which the gate of the write transistor 34 is connected. The fact that 36 and 39 are, indeed, two different word lines is readily understood from column 1, line 40 et seq. In particular, it is stated in column 1, line 40 et seq. of the Itoh reference that:

“For writing, the word lines 36 and 39 are made High and the write bit line 40 is made to carry either “1” or “0.” After writing, the read transistor 39 is capped off, and the charge storage layer 35 is electrically floating.

For reading, only the read word line 36 is made High, and the gate electrode potential of the read transistor 33 rises because of the capacitor coupling.”

As such, it is readily clear from this portion of the Itoh reference that the word lines 36 and 39 of Itoh are two completely different word lines. As such, this structure of Itoh cannot be read on the amended claim 1 which clearly defines that the capacitor terminal and the gate of the write transistor are commonly coupled to the same one of the plurality of word lines. As such, it is respectfully submitted that amended claim 1 clearly defines a significantly different structure than that taught or suggested by Itoh.

Beyond the difference in structure, it is noted that this structural difference will cause a completely different operation than that set forth by Itoh. As noted above, Fig. 2 of Itoh is based on the concept that, during reading, only the read word line 36 is made High, while, during writing, both of the word lines 36 and 39 are made High. This is a completely different operation than in the present invention where the capacitor and the gate of the write transistor are connected to the same word line. Obviously, whenever the word line (e.g., WL11 in Fig. 1) is made High, this High signal will be applied to both the capacitor and the write transistor QW. Therefore, the present structural difference defined by amended claim 1 results in a significantly different operation than that set forth in Itoh with regard to the prior art Fig. 2 thereof.

For the reasons set forth above, it is respectfully submitted that amended claim 1, and its dependent claims 2-6 and 8-20, clearly define over the Itoh reference. Therefore, reconsideration and removal of the 35 U.S.C. § 102 rejection based on Itoh is earnestly solicited.

In addition, reconsideration and removal of the obviousness type double patenting rejection set forth on page 5 et seq. of the Office Action is also respectfully requested. Although Applicants respectfully submit that the claims of the present application define a separate patentable invention from the invention defined in claims 1-7, 9-14, 17 and 18 of the parent U.S. Patent 6,515,892, in order to obviate the obviousness type double patenting rejection, Applicants are submitting herewith a Terminal Disclaimer. Accordingly, reconsideration and removal of the obviousness type double patenting rejection is earnestly solicited.

If the Examiner believes that there are any other points which may be clarified or otherwise disposed of either by telephone discussion or by personal interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Antonelli, Terry, Stout & Kraus, LLP Deposit Account No. 01-2135 (Docket No. 520.40847CC2), and please credit any excess fees to such Deposit Account.

Respectfully submitted,

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